User Manual v 1.5

January 2014

MULTI Touch LED LCD Series

TRIUMPH BOARD 55” MULTI Touch LED LCD
TRIUMPH BOARD 65” MULTI Touch LED LCD
TRIUMPH BOARD 70” MULTI Touch LED LCD
TRIUMPH BOARD 84” MULTI Touch LED LCD

Contents

1) Safety Warning 4
2) Product Description 6
3) Technical specifications 7
4) Installation 10
4.1) Package content 10
4.2) Control Panel 11
4.3) Terminal Interface 12
4.4) Remote control 14
4.5) Remote Control Buttons Function Description 15
4.6) Remote Control Instruction 17
5) Connecting and Setting 18
5.1) External Computer and Touch Connecting 18
5.2) Suggest configuration of internal / external computer 19
5.3) TV Aerial (optional) 19
5.4) A/V Connection 19
5.4.1) AV IN 19
5.4.2) S-VIDEO 20
5.4.3) YPbPr 20
5.4.4) HDMI1/HDMI2 21
5.4.5) Coaxial Connecting 21
5.4.6) VGA OUT 22
5.4.7) AV OUT 22
5.4.8) USB Device 23
5.4.9) Network Cable 23
5.4.10) Microphone 23
5.4.11) RS232 connecting (optional, part of TV Tuner) 23
5.4.12) Internal PC basic operations: 24
6) Menu Operation 25
6.1) Input source 25
6.2) First time Installation 25
6.3) Auto Tuning 26
6.4) ChannelMenu 26
6.4.1) DTV Manual Tuning ATV Manual Tuning 27
6.4.2) Program Edit 27
6.4.3) Signal Information 28
6.4.4) CI Information 28

6.4.5) Screen Menu 28
6.5) Picture Menu 29
6.6) Sound Menu 30
6.7) Time Menu 30
6.8) Lock Menu 31
6.8.1) Block Program 31
6.9) Setup Menu 32
6.10) EPG 32
7) Troubleshooting 34
7.1) Software Reinstallation 35
7.2.) Turning off the Touch keyboard in Windows 36
8) Software protocols 37
8.1) Description 37
8.2) Protokol 38
9) Care and Maintenance 42
10) Repair Service and Contacts 43

DECLARATION OF CONFORMITY

We TRIUMPH BOARD a.s., Neklanova 122/15, 128 00 Praha 2

Declare under sole responsibility that the product:

TRIUMPH BOARD MULTI Touch LED LCD Series

Model: 55” MULTI Touch LED LCD / 65” MULTI Touch LED LCD

70” MULTI Touch LED LCD / 84” MULTI Touch LED LCD

EAN: 8592580111167, 8592580111266, 8592580111310, 8592580111235 / 8592580111174, 8592580111273, 8592580111327, 8592580111242

8592580111181, 8592580111280, 8592580111334, 8592580111297 / 8592580111150, 8592580111198, 8592580111341, 8592580111303

is in conformity of essential requirements of EU directives:

EU Standards
EN 55022:2010 EN 55024:2010 EN 55013:2001+A1:2003+A2:2006 EN 55020:2007+A11:2011 EN 61000-3-2:2006+A1:2009+A2:2009 EN 61000-3-3:2008

In the configuration tested, the EUT complied with the standards specified above.

Place of Issue: Prague

Datum of issue: 25th March 2013

TRIUMPH BOARD®
TRIUMPH BOARD a.s.

Ing. Ondřej Kryšpín, Chairman of the Board of Directors

Note: Translation from original CE

1)Safety Warning

Before operating the unit, please read this manual thoroughly, and retain it for future reference.

Placement

- Do not place the unit on an unstable cart, stand, tripod, bracket, table, or shelf. Do not expose the unit to direct sunlight and other sources of heat.
- Do not put the unit near appliances that create magnetic fields. Do not handle liquids near or on the unit.
- Never spill liquid of any kind into the unit
- Do not put heavy objects on top of the unit.

Power Supply

- Check that the unit's operating voltage is identical with your local power supply.
- Please unplug power supply and aerial plug when there is a thunder-storm or lightning.
- Please unplug power supply, when there is nobody at home or when the unit will not be used over an extended period. Please keep power cord from physical or mechanical damage.
- Please use exclusive power cord, don't modify or lengthen it.
- Please check and ensure AC source is appropriately earthed.
- For 55"/65"/70" display equipment: Fuse in inlet, 4A, 250 VAC.
- For 84" display equipment: Fuse in inlet, 6.3A, 250 VAC.

LCD Screen

- Never use any other tough or sharp object to replace the plastic stylus / writing pen.
- Unplug the power supply plug before cleaning.
- Clean the screen with a soft dustless and dry cloth.
- Never use water or the spray type detergent to clean the unit.
- For deep clean, contact an authorized service center.
- Please don't display the high brightness image on the screen for extended periods.

Sight Distance

- The best distance between audience and screen is 5-7 times that of screen diagonal.
- The best viewing angle between audience and screen is less than 176 degrees.

Temperature

- Do not place the unit near or over a radiator or heater.
- If your unit is suddenly moved from a cold to a warm place, unplug the power cord for at least two hours so that moisture that may have formed inside the unit can dry completely.

Humidity

- Do not expose machine to rain, damp or place near water.
- Ensure the indoor drying and cool.

Ventilation

- Keep the ventilation openings clear.
- Ensure that the unit has enough space for all round ventilation, recommended value: left, right and back >10cm, top> 20cm.

Earphone

- Extended use of earphones on high volume will affect hearing. Before using

earphones, please turn down the volume in advance.

Standby

- Unit will enter standby mode after double-clicking the standby key ⏻ for switching off internal PC. The LED indicator in the right / bottom corner of the frame illuminates orange in standby mode.

Battery

- Please dispose of batteries responsibly.
- Please don't let children touch the batteries.
- Do not throw batteries into a fire.

2) Product Description

TRIUMPH BOARD MULTI Touch LED LCD Series

TRIUMPH BOARD MULTI Touch LED LCD are fully integrated, professional, multi touch FULL HD LED LCD Monitors. The IR LED optical technology enables six finger touches simultaneously using fingers, stylus or even a pointer.

TRIUMPH BOARD MULTI Touch LED LCD are an effective presentations tool to show pictures, data, presentations, thoughts, ideas and business forecasts interactively. Engage the audience with the presentation with direct control of the computer through the LED LCD MULTI Touch Monitor.

TRIUMPH BOARD MULTI Touch LED LCD – no need for a projector! Easy installation! No limitations caused by light conditions! Elegant and stylish appearance!

TRIUMPH BOARD MINI PC for MULTI Touch LED LCD Series

TRIUMPH BOARD MINI PC is a powerful, fully integrated personal computer for TRIUMPH BOARD LED LCD MULTI Touch Series.

TRIUMPH BOARD MINI PC is equipped with Intel i5 processor, Intel graphics card and 4 GB RAM, which ensures high power for running current software. 500 GB hard disk provides sufficient capacity for saving and storing user´s data.

TRIUMPH BOARD MINI PC is an ideal specification for TB Comenius Office, MyScript Stylus, RMeasiteach Next generation and Display Note software bundle which are delivered together with the TRIUMPH BOARD LED LCD Monitors.

Mini PC (optional)

LED LCD monitor

3) Technical specifications

TRIUMPH BOARD 55“ MULTI Touch LED LCD

EAN:	8592580111167,8592580111266, 8592580111310,8592580111235
Screen Type:	TFT LCD/ A Standard/ LED backlight
Resolution:	1920 x1080
Refreshing Sequence:	6,5 ms, 100/120 Hz, 4000:1
Display Area:	1209.6(H) × 680.4(V)
Outline Dimension:	1369 x 828 x 104 mm
Package Dimension:	1490 x 1010 x 240 mm
Net / Gross weight:	47/65 kg

TRIUMPH BOARD 65“ MULTI Touch LED LCD

EAN:	8592580111174,8592580111273, 8592580111327,8592580111242
Screen Type:	TFT LCD/ A Standard/ LED backlight
Resolution:	1920 x1080
Refreshing Sequence:	8 ms, 100/120 Hz, 4000:1
Display Area:	1428.48 (H) x 803.52 (V)
Outline Dimension:	1591 x 961 x 110 mm
Package Dimension:	1728 x 1140 x 250 mm
Net / Gross weight:	66/85 kg

TRIUMPH BOARD 70“ MULTI Touch LED LCD

EAN:	8592580111181,8592580111280, 8592580111334,8592580111297
Screen Type:	TFT LCD/ A Standard/ LED backlight
Resolution:	1920 x1080
Refreshing Sequence:	4 ms, 120 Hz, 4000:1
Display Area:	1538.880 (H) x 865.620 (V)
Outline Dimension:	1713 x 1035 x 98 mm
Package Dimension:	1840 x 1210 x 295 mm
Net / Gross weight:	71/94 kg

TRIUMPH BOARD 84“ MULTI Touch LED LCD

EAN:	8592580111150,8592580111198, 8592580111341,8592580111303
Screen Type:	TFT LCD/ A Standard/ LED backlight
Resolution:	3840 x 2160 supp. by panel 1920 x 1080 supp. by MINI PC
Refreshing Sequence:	5 ms, 120 Hz, 1600:1
Display Area:	1860.48 (H) x 1046.52 (V)
Outline Dimension:	2005.3 x 1191.5 x 122.9 mm

Package Dimension:	2168 x 1508 x 318 mm
Net / Gross weight:	118/148 kg

Touch System

Sensing Type:	Infrared Transmission (multi-touch)
Response Time:	< 8ms (typ)
Response Area:	> ø 5mm
Scan Frequency:	100Hz
Output Coordinates:	4096×4096
Communication Mode:	Full-speed USB
Writing Facility:	Any Opaque Object that > ø 5mm
Writing Screen:	Mohs hardness of 7
PC System:	Optional
TV Tuner:	Optional, ATV/DVB-T

Inputs and Outputs

HDMI:	2
S-Video:	1
Coaxial:	1
Audio IN:	2
VGA IN:	2
AV OUT:	1
Touch OUT:	1
CI IN:	1
AV IN:	1
Component:	1
AC IN:	1
Power:	1

Sound System

Power Amplify:	30W
Number of Sound box:	2
Sound:	Surround

Power

Power Requirements:	100 – 240 V AC 50/60 Hz
Overall Power Consumption:	< 500 W
Standby Power Consumption:	< 0,5 W

Ambient Condition

Operation Temperature	0 – 40 °C
Operation Humidity:	10 – 90% RH
Storage Temperature:	- 10 C to 60 °C
Storage Humidity:	10 – 95% RH

TRIUMPH BOARD MINI PC6 for MULTI Touch LED LCD Series

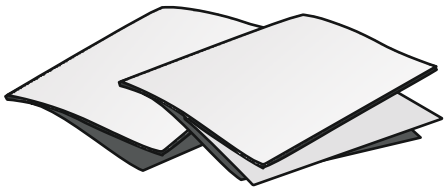
EAN:	8592580111594
Processor:	Intel i5
Graphics:	Integrated Intel HD4000
Sound Card:	Integrated High Definition AudioStereo
Networking:	Integrated 10/100/1000 Mbps adapted
Memory:	4 GB DDRIII
Hard Drive:	500 GB SATA
WIFI:	802.11 a/b/g/n, 2x2, dual-band WiFi 2,4/5 GHz + Bluetooth 4.0
USB:	4x USB 2.0 and 2x USB 3.0
Lan Port (RJ45):	1
VGA Out:	1
Audio:	Side Headphone and Mic Ports
Net / Gross Weight:	1/1,3 kg
Processor:	Intel i5

4) Installation

4.1) Package content

MULTI Touch LED LCD

Quick User Guide, User Manual, SW Manual, Styluses, Battery, Remote Control, Power Cords, VGA Cable, USB Cable, Audio Cable and USB Flash Drive with software packages.



Quick User Guide, User Manual, SW Manual

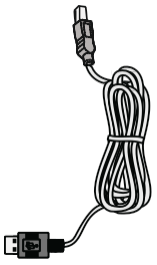
2x Stylus

Batteries

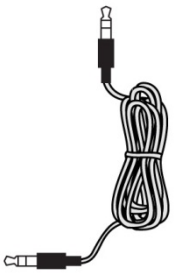
Remote control

Power Cord (EU, UK, US)

VGA Cable



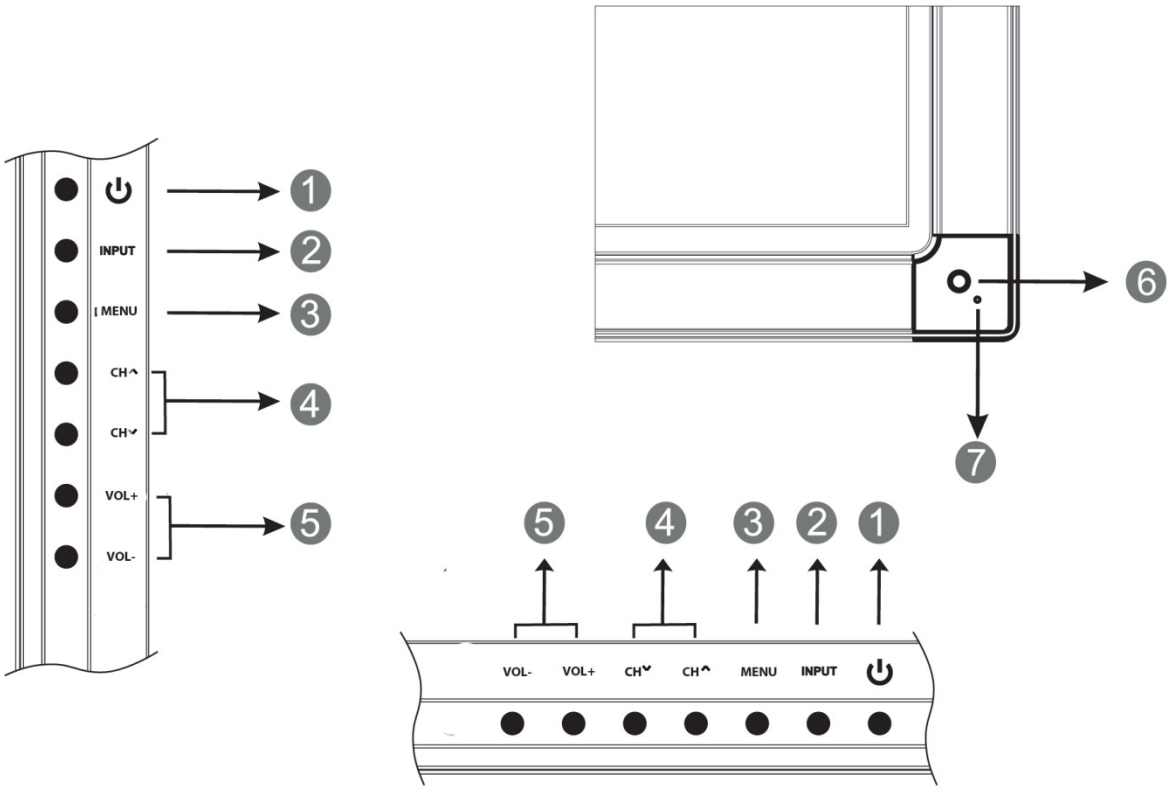
USB Cable



Audio Cable

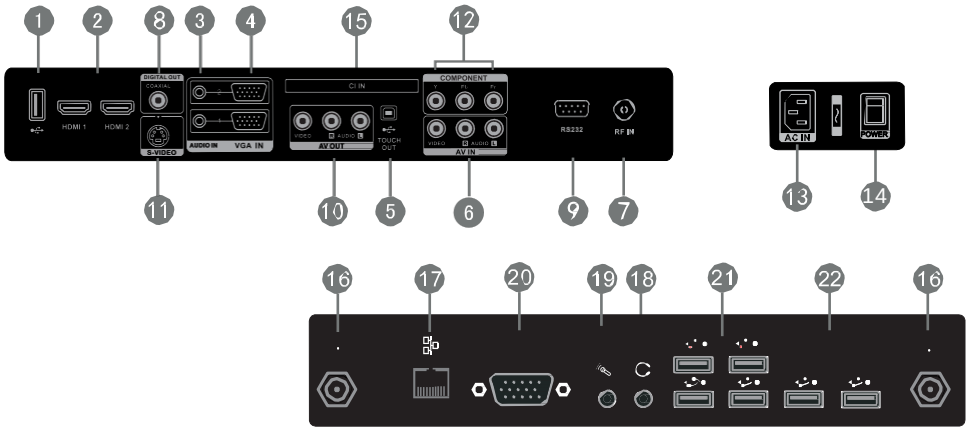
USB Flash Drive

4.2) Control Panel



Number	Item	Function Description
1	⏻	Power on/off
2	INPUT	Select signal source
3	MENU	OSD Menu on/off
4	CH. ^ ˅	Switch between channels according to channel number order. Move between OSD items menu up and down
5	VOL+/-	Volume adjust. Set value of the item in the OSD menu, move left, right
6	Remote control signal receiver	Receive the remote control signal. After pressing the button on the remote control LED flashes.
7	Power indicator	Indicator color shows the status of power on/off. (on - green / standby mode - orange / off - off)

4.3) Terminal Interface

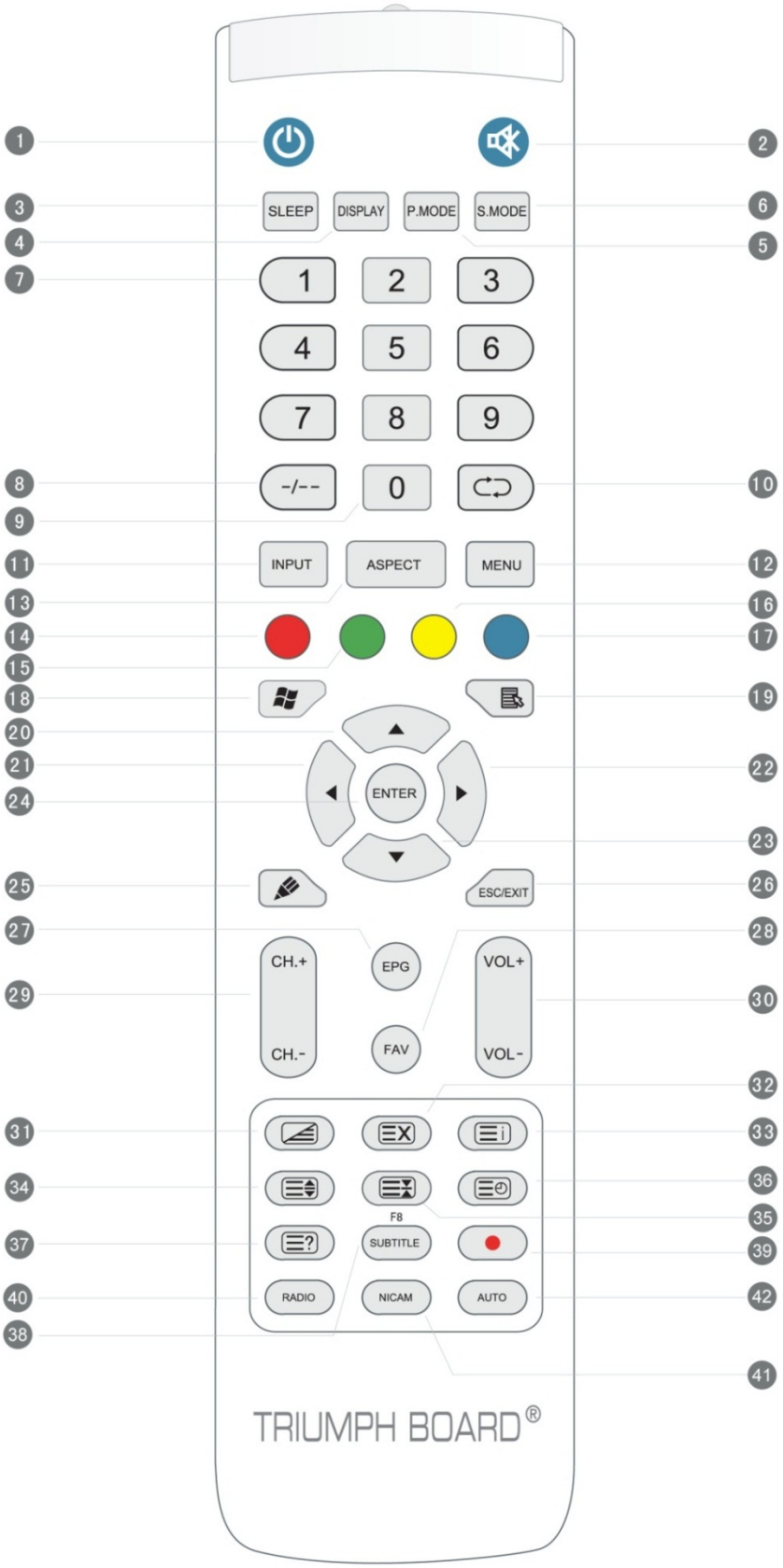


Number	Item	Function Description
1		TV Motherboard Upgrade Interface
2	HDMI IN	High Definition Multimedia Interface
3	AUDIO IN	Connect PC Audio from external sources
4	VGA IN	Connect PC Image from external sources
5	TOUCH OUT	Signal input for touch function of external computer. An external computer can be controlled in WIN7/8 via LED LCD Monitor without external driver if the devices are connected via USB cable. For calibration and settings of the external device to install Touch Service Driver.
6	AV IN	Compound video, Audio-IN
7	RF IN	CATV interface / antenna input. Only for analog and digital TV mode
8	COAXIAL	Coaxial output for audio devices
9	RS 232	Configuration serial interface used for data transfer and device control
10	AV OUT	Audio/Video-OUT to an external display device
11	S-VIDEO	S-VIDEO input (The Audio-IN share with AV)
12	COMPONENT	YPbPr signal input, connect DVD, set -top -box with YPbPr
13	AC IN	AC source input
14	Power supply switch, Turn the AC source on and off	Power supply switch, Turn the AC source on and off

15	CI IN	Digital TV CI card slot
16		WIFI and Bluetooth antenna interface
17	LAN IN	Standard net office, Connect Rj45 net interface
18	AUDIO OUT	Connect audio cable to the external device audio input
19	MIC	Connect a collect device with microphone
20	VGA OUT	Connect External Display VGA-IN to the output device
21		Connect USB device 2.0, such as Hard Disk, USB keyboard mouse etc.
22		Connect USB device 3.0, such as Hard Disk, USB keyboard mouse etc.

NOTE: Do not include interface 16, 17, 18, 19, 20, 21 a 22 if unit excludes internal PC and 7, 9 without TV Tuner.

4.4) Remote control



4.5) Remote Control Buttons Function Description

Number	Item	Function Description
1	⏻	Press to POWER ON/OFF; Extended press 5s to shut down
2	🔇	Mute ON/OFF
3	SLEEP	Set the sleep time, 0-240 minutes range
4	DISPLAY	Display the information of the current source
5	P. MODE	Picture mode selection
6	S. MODE	Sound Mode selection
7	Numeric button	TV channel numeric input button
8	-/--, ALT + TAB	TV channel switch button; Internal PC programs window switch button
9	0	TV numeric input button
10	⮌, ALT + F4	Return to previous channel; Internal PC programs window close button. Pressing the button on the internal computer WINDOWS Desktop will turn off internal computer
11	INPUT	Source selected button
12	MENU	Menu display, input source selection
13	RESET/ASPECT	Press reset touch frames under the PC, HDMI, VGA source; Adjust the picture ratio. Easy Service Driver must be installed.
14	RED/ALT	TV source button; ALT key in WINDOWS mode of internal computer
15	GREEN/TAB	TV source button; TAB key in WINDOWS mode of internal computer
16	YELLOW/DESKTOP	TV source button; Fast switch to internal PC WINDOWS Desktop button.
17	BLUE/BACKSPACE	TV source button; Internal PC BACKSPACE button.
18	⊞	Internal PC Windows START button,
19	☰	Internal PC menu button; mouse right-click function
20	▲	Direction button, press to go up in OSD menu and WINDOWS internal PC mode
21	◀	Direction button, press to go left in OSD menu and WINDOWS internal PC mode
22	▶	Direction button, press to go right in OSD menu and WINDOWS internal PC mode

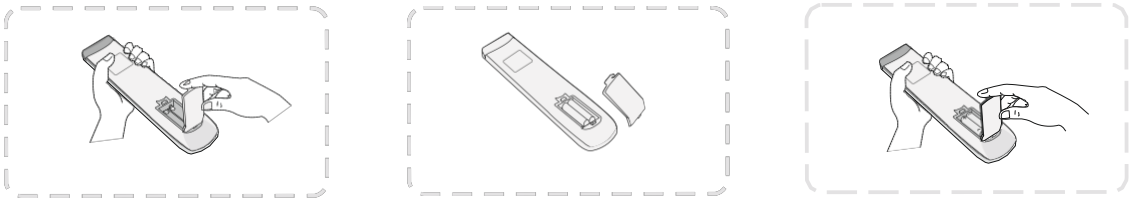
23	▼	Direction button, press to down in OSD menu and WINDOWS internal PC mode
24	ENTER	Enter button, press to select status. Left mouse- click function
25	D. USB	Startup the writing software; Fast to choose the writing pen.
26	ESC/EXIT, D. SETUP	ESC/EXIT button, Press to exit current status; DVD menu button
27	EPG	Digital program guide
28	FAV´, SPACE	Favorite channel, Space button
29	CH. +, CH.-	Channel add and subtract
30	VOL+,VOL-	Volume increase and decrease
31	◀◀ ´ F1´	F1 Function button; Teletext display\overlay\close button
32	▶▶ ´ F2´	F2 Function button; Teletext conceal button
33	▶II ´ F3´	F3 Function button; Teletext index button
34	I◀◀ ´ F4´	F4 Function button; Teletext zoom in button
35	▶▶I ´ F5´	F5 Function button; Teletext lock button
36	■ ´ F6´	F6 Function button; Teletext sub-page button
37	ANGLE´ F7´	F7 Function button; Display the concealed teletext button
38	SUBTITLE´ F8´	digital TV sub-title button; F8 Function button
39	▲´ F9´ ●	F9 Function button;
40	GOTO´ F10´ RADIO	F10 Function button; Digital TV radio button
41	AUDIO´ F11´ NICAM	Audio channel select; F11 Function button; Nicam button
42	REPEAT ´ F12´ AUTO	F12 Function button; Auto adjust the picture button

NOTE: All functions related to the computer cannot work if the unit does not have the internal PC.

4.6) Remote Control Instruction

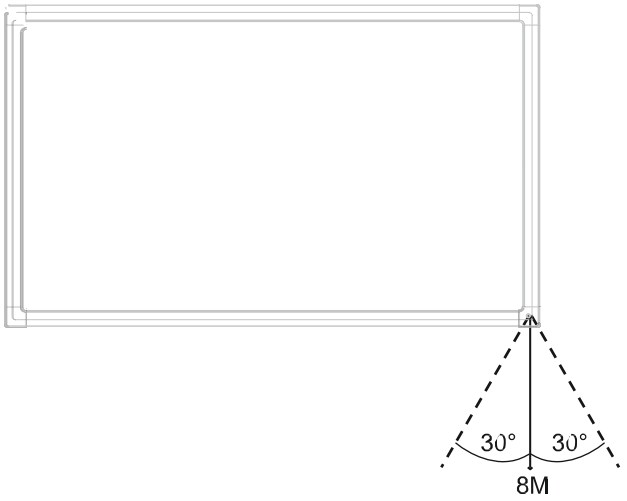
a) Insert the Batteries

- Remove the cover on the rear of the remote control
- Insert two “AAA” batteries and observe the respect the polarities: + on the battery against +,- on the battery against - . Please do not mix new and old batteries.
- Replace the cover by aligning the base of the remote control and pressing it back into place.

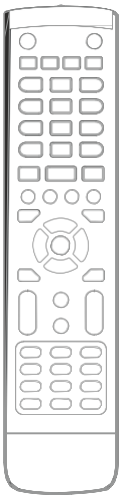


（1） （2） （3）

b) Remote control area



The range of remote control receiver is as shown. Please throw the scrap batteries into the recycle bin by way of environmental protection.



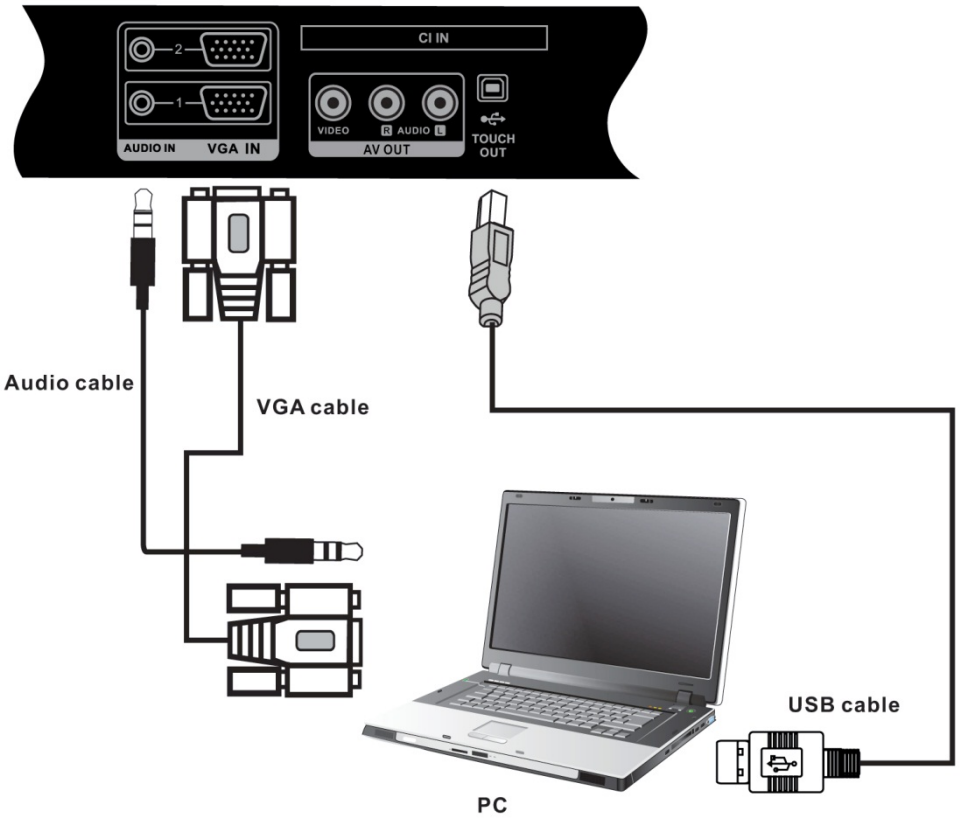
CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTION.

5) Connecting and Setting

CAUTION
FOR THE SAFETY OF YOU AND YOUR UNIT, PLEASE DO NOT CONNECT ANY POWER SUPPLY BEFORE THE EXTERNAL DEVICE IS PREPARED

5.1) External Computer and Touch Connecting



a) Connect a VGA cable (15pin) between the VGA and external PC
b) Connect an earphone cable between the PC and audio at the same time
c) Connect a USB cable between the external PC and USB terminal (Touch out)
d) Plug the POWER cord and switch it on from the rear panel
e) Startup the external computer
f) Press ⏻ to turn the power on
g) When using a laptop redirect the output to LED LCD Monitor press functional "F" key. The value of the „F“ key varies by notebook manufacturers.
h) If picture signal of external computer is not detected automatically press INPUT to switch to VGA1 / VGA2 source
i) For calibration and settings of the external device to install Touch Service Driver

NOTE: The best resolution of external computer input is 1920*1080
The unit can connect with the external PC via HDMI. After connection, press the INPUT button and switch on the source computer (HDMI1 / HDMI2) signal. When using the appropriate drivers for your graphics card with HDMI connection and HDMI cable (video / sound) does not need to use extra audio cable for audio.

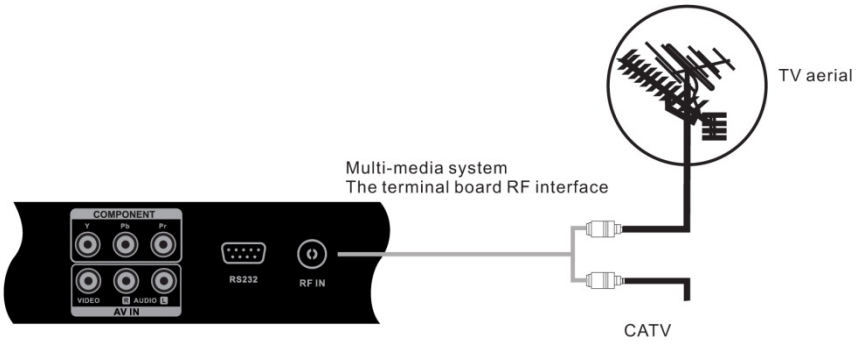
5.2) Suggest configuration of internal / external computer

- 2.0 GHz Processor
- 1GB RAM Memory
- More than 256 color display card
- 1GB Available Hard Drive
- VGA-OUT/HDMI-OUT
- Audio-OUT
- USB Interface

Support Resolution 800*600, 1024*768, 1920*1080

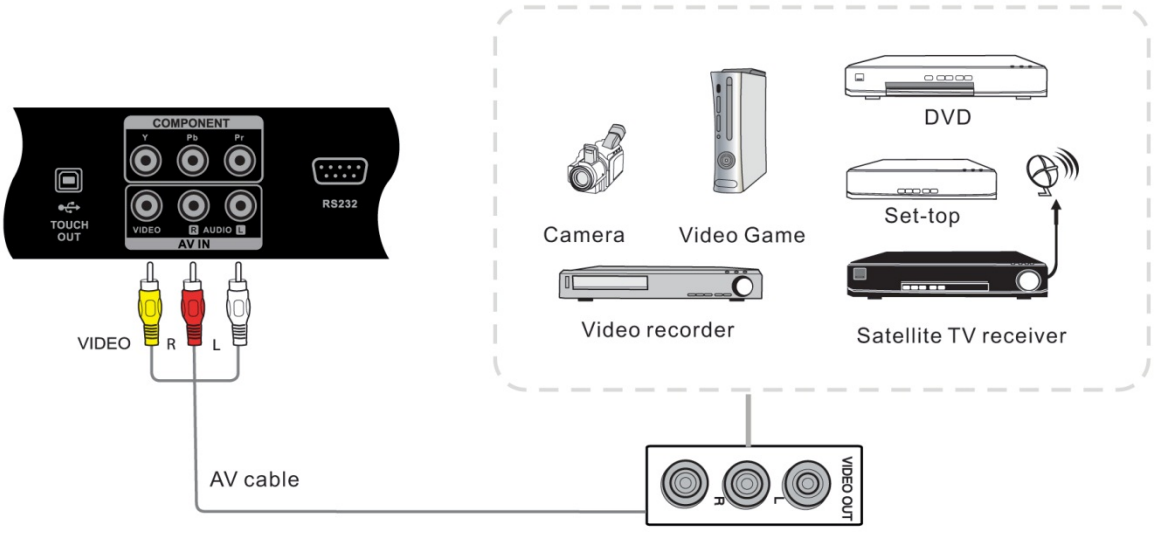
5.3) TV Aerial (optional)

a) Connect a RF cable with CATV terminal
b) Plug the POWER cord and switch it on from the rear panel
c) Press ⏻ to turn the power on
d) Press INPUT switch to TV source (ATV / DTV)
e) Press MENU and select auto tuning



5.4) A/V Connection

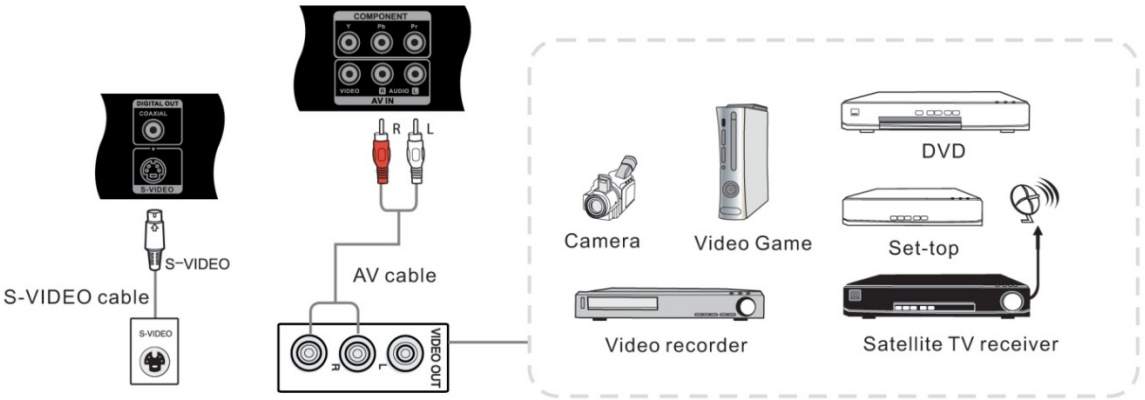
5.4.1) AV IN



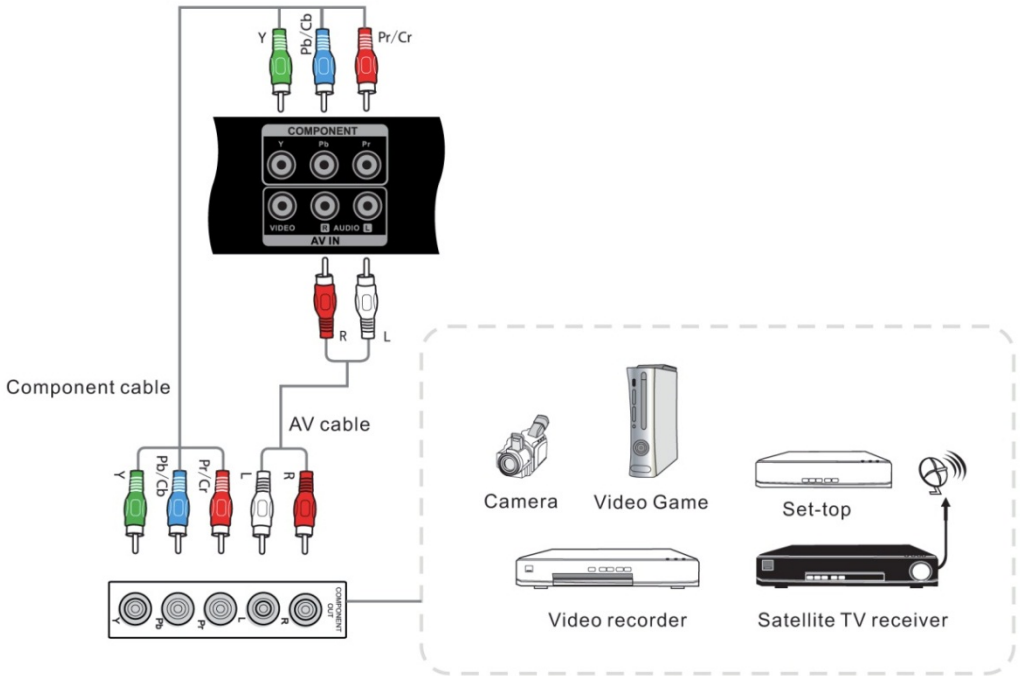
a) Connect AV cable with the device with AV-OUT (Yellow is Video, Red is Audio-R/right, White is Audio-L/left)
b) Plug the POWER cord and switch it on from the rear panel of LED LCD Monitor.
c) Press ⏻ to turn the power on
d) Press INPUT switch to AV source

5.4.2) S-VIDEO

a) Connect S-VIDEO cable with the device with S-VIDEO.
b) Connect the audio cable for audio (red connector is Audio-R (right), white connector is the Audio-L (left))
c) Plug the POWER cord and switch it on from the rear panel of LED LCD Monitor.
d) Press ⏻to turn the power on
e) Press INPUT switch to S-VIDEO source

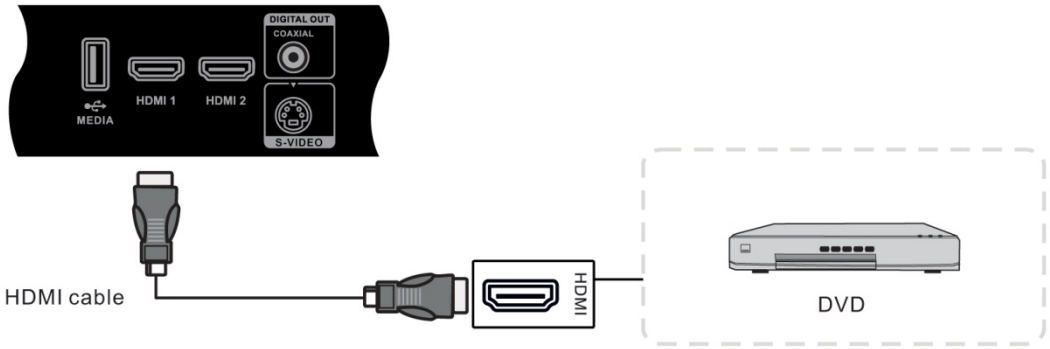


5.4.3) YPbPr



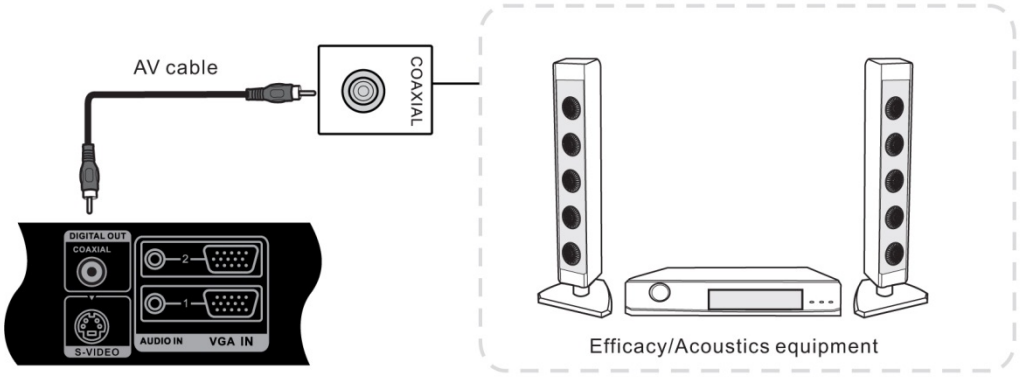
a) Connect an YPbPr cable with the device with YPbPr
b) Connect the audio cable for audio (red connector is Audio-R (right), white connector is Audio-L (left))
c) Plug the POWER cord and switch it on from the rear panel
d) Press ⏻ to turn the power on
e) Press INPUT switch to YPbPr source

5.4.4) HDMI1/HDMI2



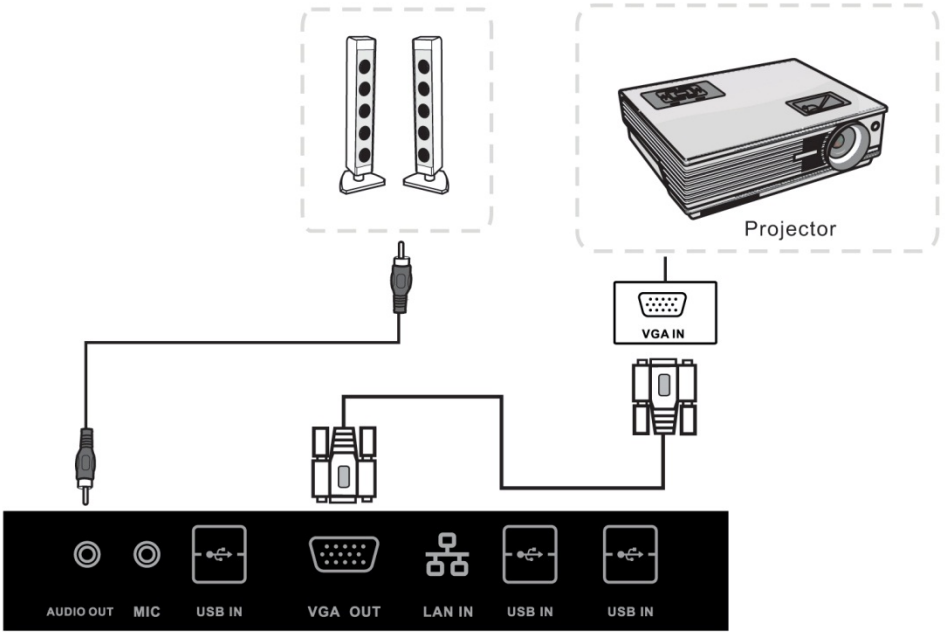
a) Connect a HDMI cable with the device with HDMI
b) Using the appropriate drivers for your graphics card with HDMI output and HDMI cable (video / sound) does not need to use extra audio cable for audio.
c) Plug the POWER cord and switch it on from the rear panel
d) Press ⏻ to turn the power on
e) Press INPUT switch to HDMI source

5.4.5) Coaxial Connecting



a) Connect a Coaxial cable with the device with coaxial connector for audio.
b) Plug the POWER cord and switch it on from the rear panel.
c) Press ⏻ to turn the power on

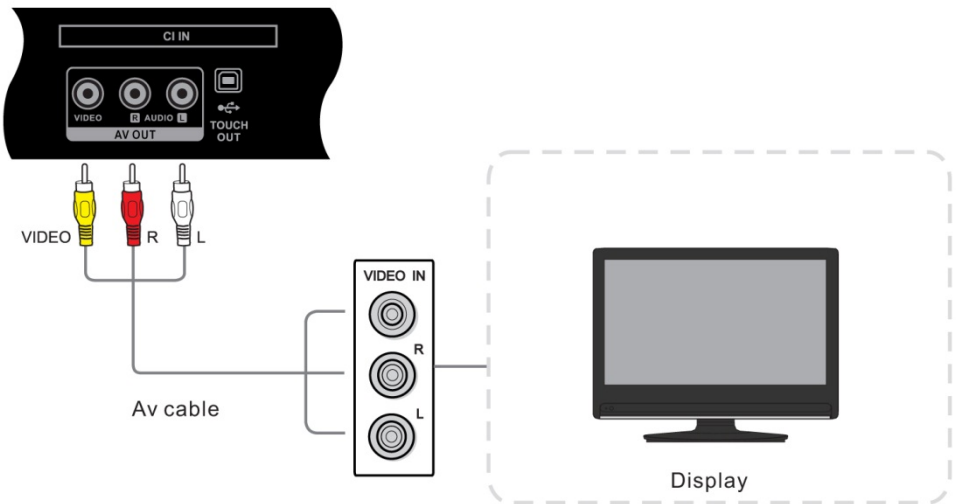
5.4.6) VGA OUT



a) Connect a VGA cable with the device with VGA, Connect an audio cable with the Audio OUT
b) Plug the POWER cord and switch it on from the rear panel
c) Press ⏻ to turn the power on
d) Press INPUT switch to HDMI source
e) Setup the VGA OUT or Multi-Screen in the WINDOWS, mouse right-click on Desktop, run Screen Resolution item of internal computer.

NOTE: VGA-OUT can output the image in the internal computer only

5.4.7) AV OUT



Connect other display
AV OUT output the picture and sound of TV S-VIDEO and AV source to external display.

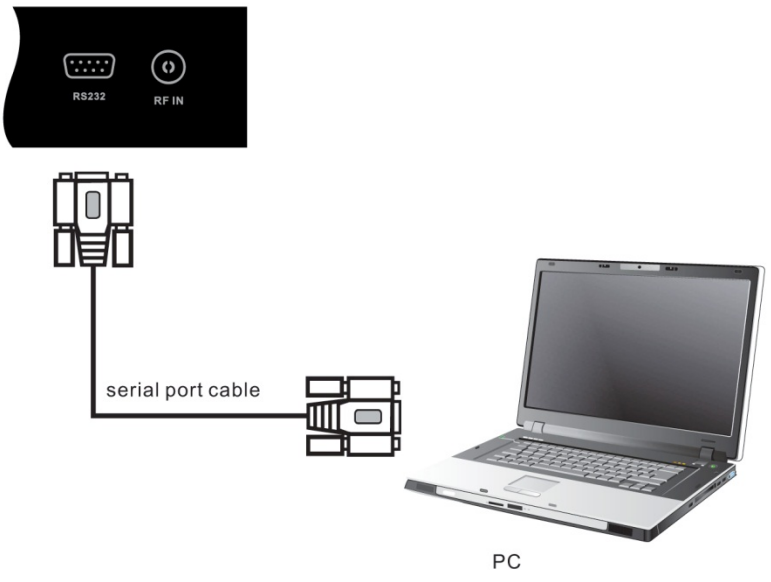
5.4.8) USB Device

Connection of USB devices
For control of internal computer

5.4.9) Network Cable

5.4.10) Microphone

5.4.11) RS232 connecting (optional, part of TV Tuner)



After connecting the external control system and unit, you can control externally some of the functions such as power on/off or adjust the volume etc.

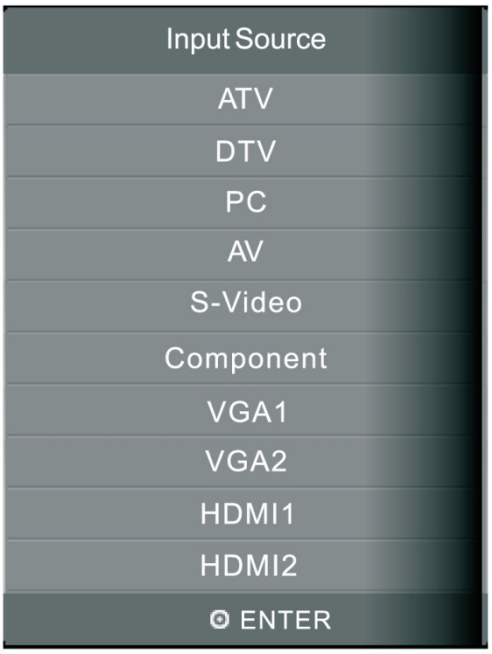
5.4.12) Internal PC basic operations:

a) Wait about 30 seconds after the machine connects to the mains, press POWER get the unit ready in standby mode.
b) Then press the button ⏻, internal computer will start.
c) To switch the internal computer off double-press ⏻

6) Menu Operation

6.1) Input source

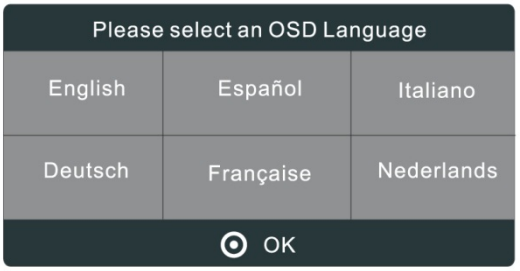
All input sources are available only with connected TV Tuner



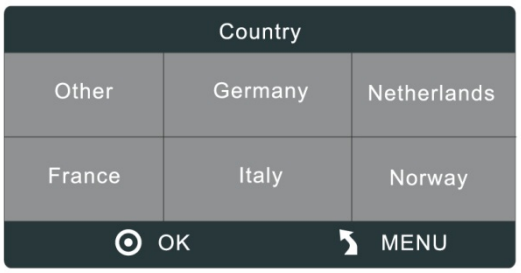
NOTE: For detail input source, please confirm with the TV set.

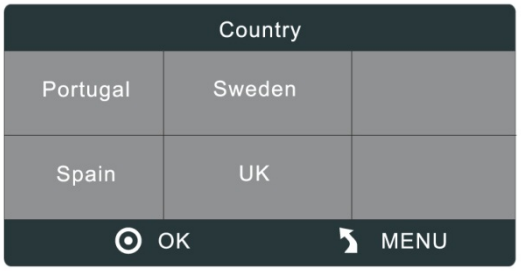
a) Press **INPUT** to display the input source list
b) Press ▼ / ▲ or **INPUT** to select the input source you want to choose
c) Press **ENTER** to enter the input source
d) Press **EXIT** to quit

6.2) First time Installation

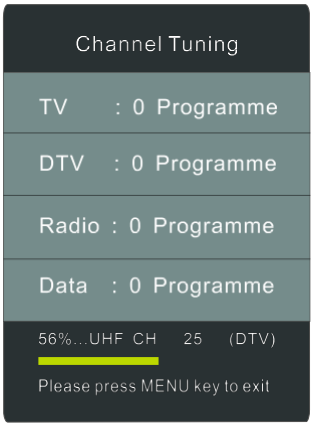


a) Press ▼ / ▲ to select OSD Language, press **OK** to select language and to enter sub-menu
b) Press ▼ / ▲ to select **Country**, press **OK** to start tuning.

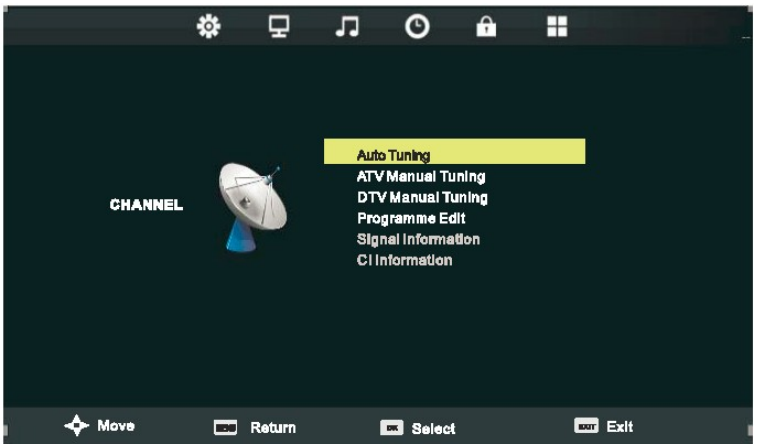




6.3) Auto Tuning


Channel Tuning
TV : 0 Programme
DTV : 0 Programme
Radio : 0 Programme
Data : 0 Programme
56%...UHF CH 25 (DTV)
Please press MENU key to exit

6.4) ChannelMenu

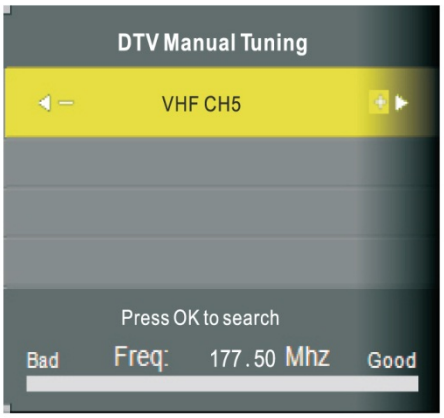


Press **MENU** to display the main menu and press ◄/► to select the item.

NOTE:
a) Channel Menu is available only in TV mode.
b) Signal Information and CI Information are available only for DTV with signal.

Auto Tuning For details see page 25.
DTV Manual Tuning Search for available digital channels manually.
ATV Manual Tuning Search for available analog channels manually.
Program Edit Set channels to favorite or edit the label of channels, for details see page 26.
Signal Information Display the information of current program.
CI Information Display the information of the CI card.

6.4.1) DTV Manual Tuning ATV Manual Tuning

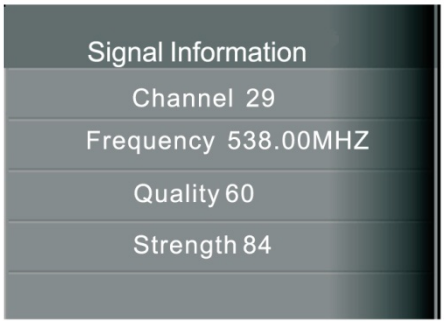


6.4.2) Program Edit

The four colored key is the shortcut key for programming the channel.
a) First press ▼ / ▲ to highlight the channel you want to delete or move or skip, then:
b) Press the **RED** button to delete the channel.
c) Press the **YELLOW** button to select and press ▼ / ▲ to move the channel.
d) Press the **BLUE** button to skip the select channel.
(Your TV set will skip the channel automatically when using CH+/- to view the channels.)
e) Press **Fav** Add or Delete the channel to your favorite list.

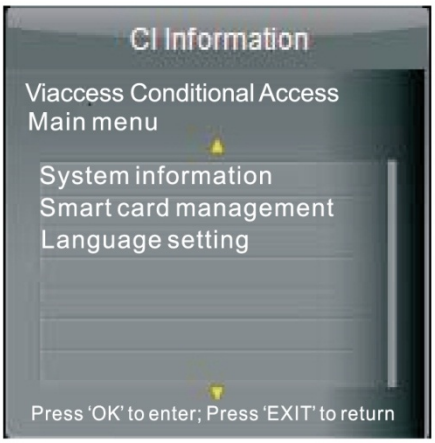
6.4.3) Signal Information

Press ▼/▲ button to select SignalInformation, the press the **OK** button to see the detail information about the signal.



6.4.4) CI Information

Press ▼/▲ button to select CI Information then press OK button to display details if you have inserted the CI card.



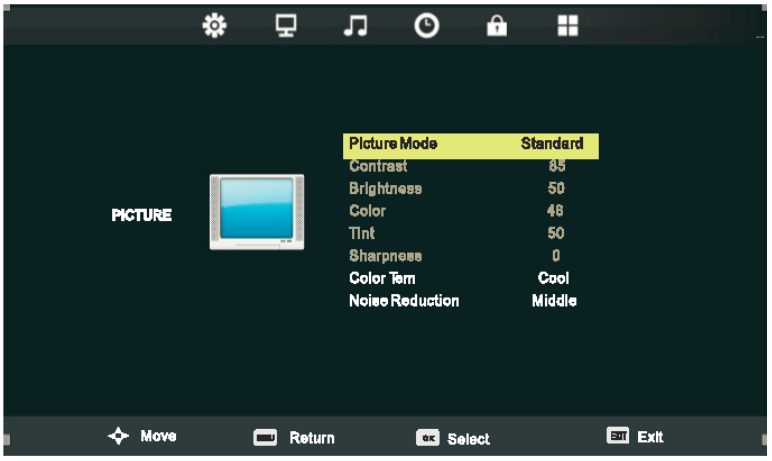
6.4.5) Screen Menu

Screen Menu is available only in PC D815 or DVI mode. When DVI signal input, only Horizontal Position and Vertical Position can be adjusted.

Press ▼ / ▲ to highlight one of the following options, then press **ENTER** to select it.

Auto Adjust Automatically adjust H-Offset, V-Offset, Size, Phase settings.
In order to get a good result, you should open a “filling the screen” picture before executing *Auto Adjust.*
H-Offset Shift the screen slightly to left or right
V-Offset Shift the screen slightly up or down
Size Adjust the picture size
Phase Adjust the DB15 picture signal sampling phase. It can affect the definition. Wrong value can result to the interference
Position Reset Reset the parameters of current menu to default value

6.5) Picture Menu



a) Press ▼ / ▲ to highlight one of the following options
b) Press **ENTER** or ► enter next sub-menu to adjust it
c) Press **EXIT** to clear on-screen menu or **MENU** back to the previous menu

Picture Mode
When Picture Mode is set to Personal, the following settings can be manually adjusted
Press P.MODE shortcut button on the remote control to select picture mode directly

Contrast/Brightness/Color/Tint/Sharpness
Highlight the item and press and a process bar appears then press ◄ / ► to adjust the value. Tint is available in analog TV or NTSC-system AV or S video modes
Press **MENU** to back the Picture Settings menu

Color Tem Press ◄ / ► to select the color temperature that you feel comfortable
Normal Basically will be accepted by most people
Cool means a high color temperature that will feel cool
Warm means a low color temperature that will feel warm

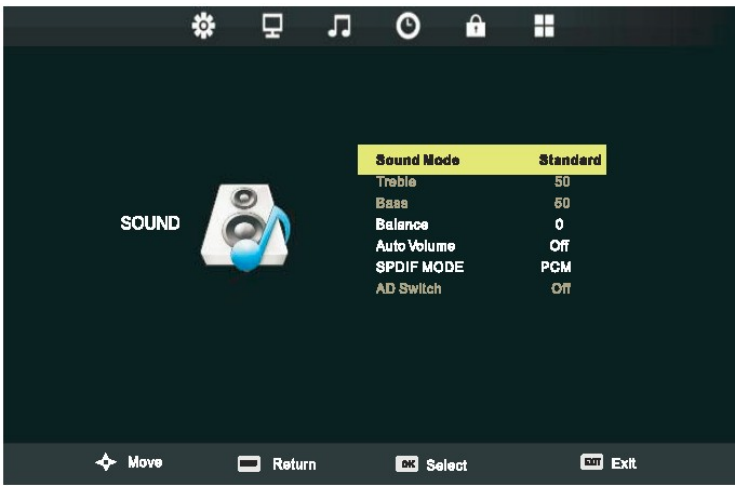
Noise Reduction Off/Low/Medium/High

You can clear up analog TV signal by reducing the dot noise. This feature is not available at PC or Media source.

120 Hz

Pass – higher touch speed (default)
AV – higher touch performance

6.6) Sound Menu



Sound Mode *Standard/Dynamic/Sports/Personal*
Only in Personal mode, the follow items can be adjusted.

Bass Adjust the low frequency band response.
Treble Adjust the high frequency band response.
Balance Adjust the level of sound coming from the left or right speaker.
Auto Volume Set to reduce the fluctuation of the sound between channels and programs automatically.
SPDIF MODE *Off Auto PCM.* Select the SPDJF mode.
AD Switch Set AD switch on or off.

6.7) Time Menu

Press **MENU** to display the main menu and press ◄/► to select the Time Menu.

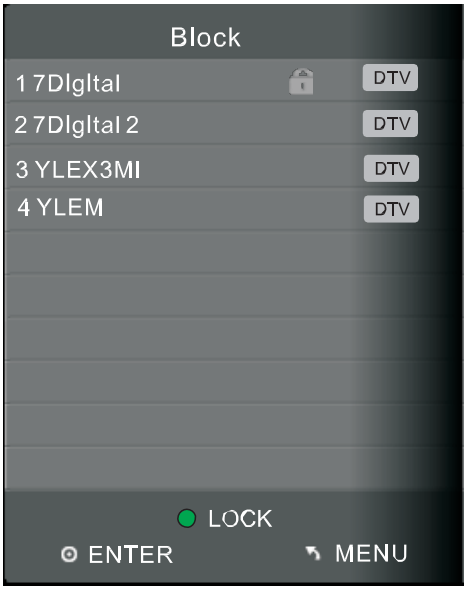
Clock and Time Zone can be used only in DTV mode
Clock It will get time from the digital input signal
Time Zone Select the time zone of your for region
NOTE: Clock and Time Zone display only for DTV mode
Sleep Time Select the time in minutes that you want the TV to shut off automatically after you set the time. Cancel by setting it to Off
Auto Sleep Select the time in hours that you want the TV to remain on after your last operation. Cancel by setting it to Off
OSD Timer Select the time in seconds that you want the on-screen-display to remain on after your last operation

6.8) Lock Menu

Press MENU to display the main menu and press ◄/► to select the Lock Menu

Lock System The default password is “0000”, and the master password is “4711”. The following items will work only when Lock system is set to ON
Set Password You can set a new password
Block program You can view the locked program by entering the password
Parental Guidance Set the TV rating based on age

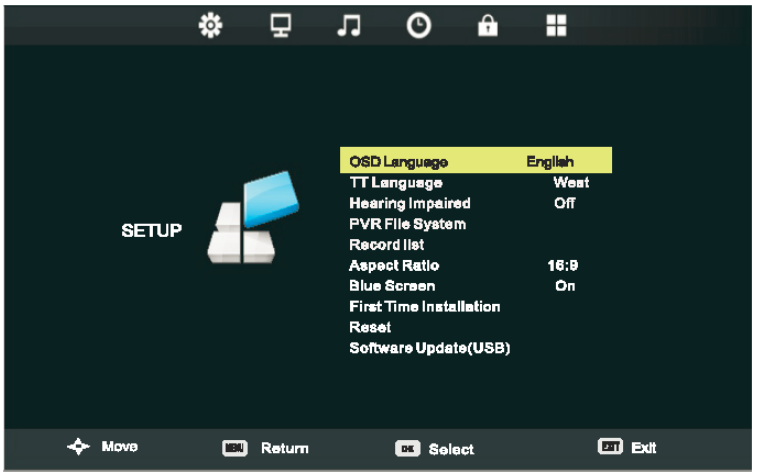
6.8.1) Block Program



Press ▼ / ▲ to select the program then press the green button to lock it
NOTE: If program is locked, you should enter password to view

6.9) Setup Menu

Some menu items are available only with a digital or analog tuner connected.

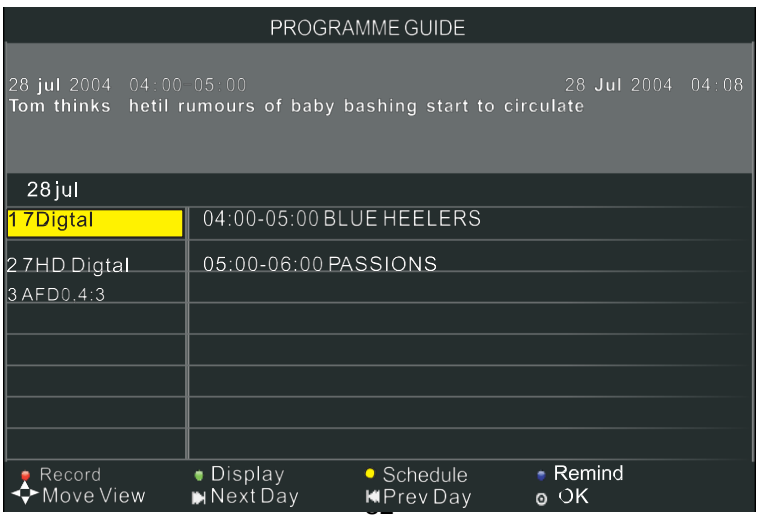


Press **MENU** to display the main menu, and press to select the Setup Menu.

OSD language Set on-screen-display menu language.
TT Language Set Tele-text language.
Hearing Impaired Set the hearing impaired mode on or off
PVR File System check and set the PVR file system
Record List Select to view the record list.
Aspect Ratio Set the display aspect ratio till the picture is fit onto the screen. The options are different according to different input source.
Blue Screen Set the screen background color blue or not when no valid signal input. When analog TV input and has no signal, snow noise will display if this option is cleared.
First Time Installation For detail, see page 24
Reset Recall the factory settings
Software Update (USB) Update your TV FW set by downloading update file "**.bin. in USB

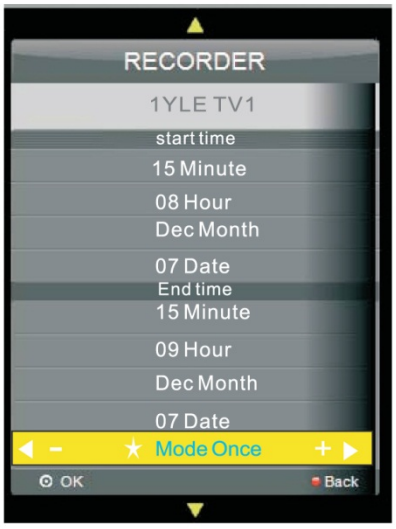
6.10) EPG

Press the EPG button on the remote control to enter EPG menu



a) Press the **RED** button to enter the Record menu. You can setup a timer for scheduled recording
b) Press the **GREEN** button to display the detail information about program
c) Press the **YELLOW** button to display the schedule list which will show all the timers you have set for reminding and recording
d) Press the **BLUE** button to setup a timer for reminding if you want the TV to remind you to watch a specified program when it´s going to start

NOTE: When the time appointment is in conflict a warning message will appear



7) Troubleshooting

Remote control out of order	1.Check whether there is an object between remote control and TV receiver 2.Check whether the batteries polarities in remote control are correct 3.Check whether the batteries are drained
The unit shuts down automatically	1.Sleeping mode setting 2.Check whether there is a sudden power failure 3.Check for signal to system and control

Internal PC mode

Out of signal	1. Check display setting. Press INPUT button to select PC source 2. Check the resolution 3. Adjust the Hs & Vs (synchronization) in the menu. Press the MENU button on the remote control and choose in menu SCREEN horizontal and vertical sync. Only in the case of VGA connections.
Background streaking	1. Choose auto adjust 2. Adjust clock and phase. Press the MENU button on the remote control and choose in menu SCREEN horizontal and vertical sync. Only in the case of VGA connections.
False color	1. Check the VGA 2. Adjust Chroma, brightness and contrast. Press the P. MODE button on the remote control and set Chroma, brightness and contrast.
Unsupported format	1. Choose auto adjust 2. Adjust clock and phase

Touch Function

Touch function void	1.Check Touch Service driver is installed correctly 2.Reinstall driver 3.Check whether the touch pen is working properly

Video not working properly

No picture/No sound	1.Check POWER status 2.Check the signal cable 3.Check if the internal PC is turned on

Picture trembles	1.Check the signal cable 2.Check for other electronics interrupting signal
Poor picture	1. Adjust Chroma, brightness and contrast in the menu. Press the P. MODE button on the remote control and set Chroma, brightness and contrast. 2.Check the signal cable

Audio not working properly

No sound	1. Check the mute key. 2. Adjust volume. 3. Check the audio cable.
Only one speaker works	1. Adjust sound balance in the menu. Press MENU on the remote control, choose SOUND item and BALANCE 2. Check the setting in sound control panel of computer. 3. Check the audio cable.
VGA-OUT silence	1. Check for proper audio connection.

7.1) Software Reinstallation

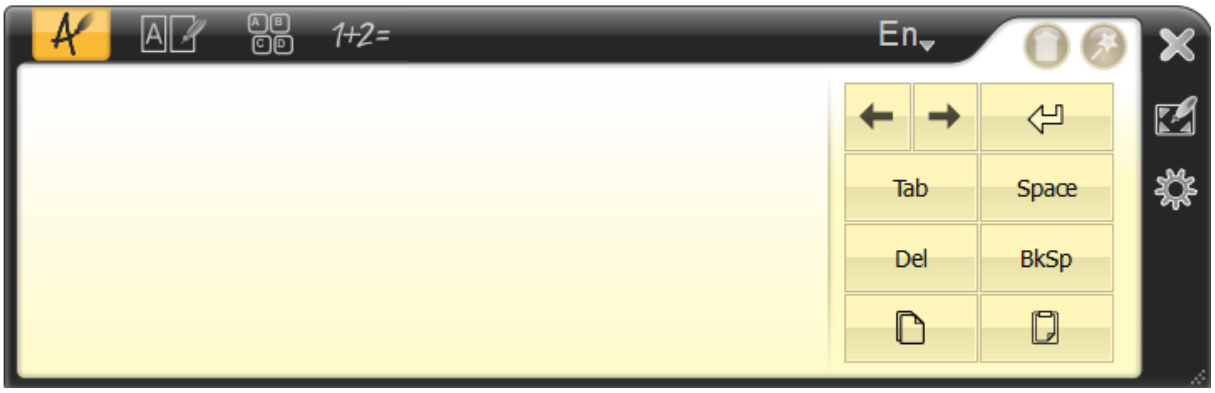
All software packages that come with the MULTI Touch LED LCD are already installed on the internal MINI PC (optional). If it is necessary to reinstall the software use an USB Flash Drive with software in USB ports in MINI PC or in your external PC.

There is also possible to reinstall all programs from disk E in your internal MINI PC if was supplied with the LED LCD screen (optional). Just simply click on “Computer” icon where you find three system disks: C, D and E.

There are all programs in installation files added on disk E which you can use for reinstalling – e.g. in case you reinstall your Operating system.

7.2.) Turning off the Touch keyboard in Windows

All TRIUMPH BOARD LED LCD Monitors are equipped with the best in class handwriting recognition software MyScript Stylus and this premium software can be used optionally with any kind of text box.
The icon of this software will pop-up automatically.
See also the MyScript Stylus User Guide (help file) in MyScript Stylus folder on USB Flash Drive.



Active Touch keyboard feature in Windows can interfere with MyScript Stylus. We recommend you to deactivate Windows Touch keyboard to use it properly:

1. Click on “Start” and choose “Control Panel”
2. Search and click on “Tablet PC settings”
3. Choose “Other”
4. Click on “Go to Input Panel Settings”
5. In “Opening” tab deselect:
   - For tablet pen input, show the icon next to the text box
   - Use the Input Panel tab
6. Click OK

8) Software protocols

This document describes the hardware interface specification and software protocols of RS232 interface communication between LED LCD and PC or other control unit with RS232 protocol.

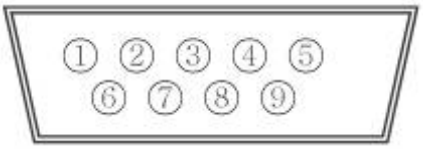
8.1) Description

Hardware specification

LED LCD communication port is in the rear side, near the Tuner.

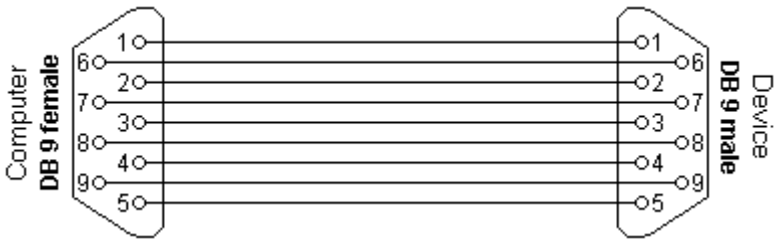
1) Connector type: DSUB 9 Pin Male
2) Pin Assignment

Male DSUB 9Pin
(outside view)



Pin #	Signal	Remark
1	NC	
2	TXD	Output to TV
3	RXD	Input from TV
4	NC	
5	GND	
6	NC	
7	NC	
8	NC	
9	NC	
frame	GND	

- Pin2 is TXD, Pin3 is RXD. Pin to Pin connection as below.



Seriál port communication setting:

- Baud Rate Select: 9600bps (fixed)
- Data bits: 8bits (fixed)
- Parity: None (fixed)
- Stop Bits: 1(fixed)

8.2) Protokol

- Command format :

No.	Content	Description	Remark
1	0xAA	Head	fixed value
2	0xBB		fixed value
3	0xCC		fixed value
4		Main	
5		subcommand	
6	0x00	Length	valid data
7	checksum	checksum	Sum from No.4 to No.6.
8	0xDD	End	fixed value
9	0xEE		fixed value
10	0xFF		fixed value

- IR code table:

Function	Mode	Code	Remark
Power on/off	ON	AA BB CC 01 00 00 01 DD EE FF	Customers need to open this “remote wake up” function in factory menu. Press “Menu+1379”>DEBUG>Item 6 switch on.
	OFF	AA BB CC 01 01 00 02 DD EE FF	
Switch input signal	ATV	AA BB CC 02 01 00 03 DD EE FF	
	DTV	AA BB CC 02 02 00 04 DD EE FF	
	AV	AA BB CC 02 09 00 0B DD EE FF	
	YPBPR	AA BB CC 02 0B 00 0D DD EE FF	
	VGA1	AA BB CC 02 03 00 05 DD EE FF	
	VGA2	AA BB CC 02 04 00 06 DD EE FF	
	HDMI1	AA BB CC 02 06 00 08 DD EE FF	
	HDMI2	AA BB CC 02 07 00 09 DD EE FF	
	USB	AA BB CC 02 05 00 07 DD EE FF	
	PC	AA BB CC 02 08 00 0A DD EE FF	
	SV	AA BB CC 02 0A 00 0C DD EE FF	
Volume	000—100	AA BB CC 03 00 xx ** DD EE FF	xx=volume vale. For example xx=30(DEC）=1E（HEX）, so xx=1E. **=03+00+1E（HEX）=21
	MUTE	AA BB CC 03 01 00 04 DD EE FF	
	UNMUTE	AA BB CC 03 01 01 05 DD EE FF	
Aspect	16:9	AA BB CC 08 00 00 08 DD EE FF	
	4:3	AA BB CC 08 01 00 09 DD EE FF	
	ZOOM1	AA BB CC 08 02 00 0A DD EE FF	

	ZOOM2	AA BB CC 08 03 00 0B DD EE FF	
	AUTO	AA BB CC 08 04 00 0C DD EE FF	
	14:9	AA BB CC 08 05 00 0D DD EE FF	
	Panorama	AA BB CC 08 06 00 0E DD EE FF	
	Point to point	AA BB CC 08 07 00 0F DD EE FF	
	JUST SCAN	AA BB CC 08 08 00 10 DD EE FF	
Channel in TV	ATV 00-99	AA BB CC 05 00 XX ** DD EE FF	XX is Channel No.;** is XX+05, the result is hexadecimal.
	DTV 000-100	AA BB CC 06 YY XX ** DD EE FF	YY is the high part of the Channel, and XX is the low part. **=06+YY+XX, the result is hexadecimal.
PC Power on/off	ON	AA BB CC 09 01 00 0A DD EE FF	
	OFF	AA BB CC 09 00 00 09 DD EE FF	
Remote control function (Part 1)	SLEEP	AA BB CC 07 00 00 07 DD EE FF	
	DISPLAY	AA BB CC 07 01 00 08 DD EE FF	
	P.MODE	AA BB CC 07 02 00 09 DD EE FF	
	S.MODE	AA BB CC 07 03 00 0A DD EE FF	
	NUM_1	AA BB CC 07 04 00 0B DD EE FF	
	NUM_2	AA BB CC 07 05 00 0C DD EE FF	
	NUM_3	AA BB CC 07 06 00 0D DD EE FF	
	NUM_4	AA BB CC 07 07 00 0E DD EE FF	
	NUM_5	AA BB CC 07 08 00 0F DD EE FF	
	NUM_6	AA BB CC 07 09 00 10 DD EE FF	
	NUM_7	AA BB CC 07 0A 00 11 DD EE FF	
	NUM_8	AA BB CC 07 0B 00 12 DD EE FF	
	NUM_9	AA BB CC 07 0C 00 13 DD EE FF	
	NUM_0	AA BB CC 07 0D 00 14 DD EE FF	
	-/--	AA BB CC 07 0E 00 15 DD EE FF	
	CH_RETURN	AA BB CC 07 0F 00 16 DD EE FF	
	ASPECT	AA BB CC 07 10 00 17 DD EE FF	
	SOURCE	AA BB CC 07 11 00 18 DD EE FF	
	MENU	AA BB CC 07 12 00 19 DD EE FF	
	EXIT	AA BB CC 07 13 00 1A DD EE FF	
	UP	AA BB CC 07 14 00 1B DD EE FF	
	DOWN	AA BB CC 07 15 00 1C DD EE FF	
	LEFT	AA BB CC 07 16 00 1D DD EE FF	
	RIGHT	AA BB CC 07 17 00 1E DD EE FF	
	ENTER	AA BB CC 07 18 00 1F DD EE FF	
	CH+	AA BB CC 07 19 00 20 DD EE FF	
	CH-	AA BB CC 07 1A 00 21 DD EE FF	
	VOL+	AA BB CC 07 1B 00 22 DD EE FF	
	VOL-	AA BB CC 07 1C 00 23 DD EE FF	
	FAV	AA BB CC 07 1D 00 24 DD EE FF	
	EPG	AA BB CC 07 1E 00 25 DD EE FF	
	TV/R	AA BB CC 07 1F 00 26 DD EE FF	
	NICAM	AA BB CC 07 20 00 27 DD EE FF	
	RECORD	AA BB CC 07 21 00 28 DD EE FF	
	SUBTITLE	AA BB CC 07 22 00 29 DD EE FF	
	AUTO	AA BB CC 07 23 00 2A DD EE FF	
	RED	AA BB CC 07 24 00 2B DD EE FF	
	GREEN	AA BB CC 07 25 00 2C DD EE FF	

	YELLOW	AA BB CC 07 26 00 2D DD EE FF	
	BLUE	AA BB CC 07 27 00 2E DD EE FF	
	TTX_MODE	AA BB CC 07 28 00 2F DD EE FF	
	TTX_UPDATE	AA BB CC 07 29 00 30 DD EE FF	
Remote control function (Part 2)	TTX_SIZE	AA BB CC 07 2A 00 31 DD EE FF	
	TTX_HOLD	AA BB CC 07 2B 00 32 DD EE FF	
	TTX_INDEX	AA BB CC 07 2C 00 33 DD EE FF	
	TTX_REVEAL	AA BB CC 07 2D 00 34 DD EE FF	
	TTX_SUBPAGE	AA BB CC 07 2E 00 35 DD EE FF	
	TTX_PAGE_UP	AA BB CC 07 2F 00 36 DD EE FF	
	TTX_PAGE_DOWN	AA BB CC 07 30 00 37 DD EE FF	
	TTX_MIX	AA BB CC 07 31 00 38 DD EE FF	
	PAUSE	AA BB CC 07 32 00 39 DD EE FF	
	STOP	AA BB CC 07 33 00 3A DD EE FF	
	BACKWARD	AA BB CC 07 34 00 3B DD EE FF	
	FORWARD	AA BB CC 07 35 00 3C DD EE FF	
	PREV	AA BB CC 07 36 00 3D DD EE FF	
	NEXT	AA BB CC 07 37 00 3E DD EE FF	
	REPEAT	AA BB CC 07 38 00 3F DD EE FF	
	GOTO	AA BB CC 07 39 00 40 DD EE FF	
DVD Function 1 (optional)	DVD_PALY_PAUSE	AA BB CC 04 00 00 04 DD EE FF	
	DVD_PAUSE	AA BB CC 04 01 00 05 DD EE FF	
	DVD_STOP	AA BB CC 04 02 00 06 DD EE FF	
	DVD_FF	AA BB CC 04 03 00 07 DD EE FF	
	DVD_FR	AA BB CC 04 04 00 08 DD EE FF	
	DVD_PREV	AA BB CC 04 05 00 09 DD EE FF	
	DVD_NEXT	AA BB CC 04 06 00 0A DD EE FF	
	DVD_1	AA BB CC 04 07 00 0B DD EE FF	
	DVD_2	AA BB CC 04 08 00 0C DD EE FF	
	DVD_3	AA BB CC 04 09 00 0D DD EE FF	
	DVD_4	AA BB CC 04 0A 00 0E DD EE FF	
	DVD_5	AA BB CC 04 0B 00 0F DD EE FF	
	DVD_6	AA BB CC 04 0C 00 10 DD EE FF	
	DVD_7	AA BB CC 04 0D 00 11 DD EE FF	
	DVD_8	AA BB CC 04 0E 00 12 DD EE FF	
	DVD_9	AA BB CC 04 0F 00 13 DD EE FF	
	DVD_0	AA BB CC 04 10 00 14 DD EE FF	
	DVD_10	AA BB CC 04 11 00 15 DD EE FF	
	DVD_RETURN	AA BB CC 04 12 00 16 DD EE FF	
	DVD_EJECT	AA BB CC 04 13 00 17 DD EE FF	
	DVD_A_B	AA BB CC 04 14 00 18 DD EE FF	
	DVD_ZOOM	AA BB CC 04 15 00 19 DD EE FF	
	DVD_SUBTITLE	AA BB CC 04 16 00 1A DD EE FF	
	DVD_DISPLAY	AA BB CC 04 17 00 1B DD EE FF	

	DVD_AUDIO	AA BB CC 04 18 00 1C DD EE FF	
	DVD_ANGLE	AA BB CC 04 19 00 1D DD EE FF	
DVD Function 2 (optional)	DVD_MENU	AA BB CC 04 1A 00 1E DD EE FF	
	DVD_TITLE	AA BB CC 04 1B 00 1F DD EE FF	
	DVD_UP	AA BB CC 04 1C 00 20 DD EE FF	
	DVD_DOWN	AA BB CC 04 1D 00 21 DD EE FF	
	DVD_LEFT	AA BB CC 04 1E 00 22 DD EE FF	
	DVD_RIGHT	AA BB CC 04 1F 00 23 DD EE FF	
	DVD_ENTER	AA BB CC 04 20 00 24 DD EE FF	
	DVD_GOTO	AA BB CC 04 21 00 25 DD EE FF	
	DVD_REPEAT	AA BB CC 04 22 00 26 DD EE FF	
	DVD_SETUP	AA BB CC 04 23 00 27 DD EE FF	
	DVD_DEVICE	AA BB CC 04 24 00 28 DD EE FF	
	DVD_PROG	AA BB CC 04 25 00 29 DD EE FF	
	DVD_CARD	AA BB CC 04 26 00 2A DD EE FF	

9) Care and Maintenance

With proper care, your unit will give you many years of service. Please follow these guidelines to get the maximum performance from your unit.

a) Cleaning

Unplug the unit from the wall outlet before cleaning or polishing it

Do not use liquid cleaners or aerosol cleaners

Use a cloth lightly dampened with water for cleaning the exterior of the unit

Repeat several times, do not handle liquids near or on the unit

b) Don't use machine for a long time

Don't use system for long periods of time, please unplug unit when not in use

To prevent system failures and power supply surges use power surge protector

c) Display modes

YPbPr Mode

Resolution / Display Mode	Vertical frequency (Hz)
480p / 480i	60
576p / 576i	50
720p	50/60
1080i	50/60
1080p	50/60

VGA Mode

Resolution / Display Mode	Vertical frequency (Hz)
640*480 / 800*480	60
1024*768 / 1280*800	60
1920*1080	50/60

HDMI / PC Mode

Resolution / Display Mode	Vertical frequency (Hz)
480p / 480i	60
576p / 576i	50
720p	50/60
1080i	50/60
1080p	50/60

10) Repair Service and Contacts

Please contact your local supplier for the warranty and technical service or find all warranty conditions and service partners on our website **www.triumphboard.com** . For any questions please email us to **info@triumphboard.com**

DISTRIBUTORE PER L'ITALIA:

AGM HIGH PERFORMANCE SOLUTIONS

VIA CALABRIA, 15 - 20090 SEGRATE (MI)
T. 02 87166000, 06 92938446 - F. 02 87153173
E. info@agmultivision.it
W. www.agmultivision.it

TRIUMPH BOARD a.s.

Neklanova 122/15

128 00 Praha 2

Czech Republic

EU

Phone: +420 224 910 221

Fax: +420 224 910 218

E-mail: info@triumphboard.com

www.triumphboard.com

Notices

Every effort has been made to ensure all information contained in this user guide is correct, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to this product which is not contained in this manual or any contrary statements contained on your purchase order shall have no force of effect unless expressly agreed upon, in writing, by this company.

Without this company permission, reproduction or reprinting this user guide or any part is prohibited.